

What is claimed is:

- 1 1. A computer-readable medium encoded with a data structure for use
2 in an image file, the data structure comprising:
3 a data portion to include first image data related to a first multimedia
4 stream, and a first arbitrary data related to a second multimedia stream; and
5 a header portion to include a first header object comprising information
6 related to the first multimedia stream, and a second header object comprising information
7 related to the second data multimedia stream.
- 1 2. The computer-readable medium of claim 1, wherein the second
2 multimedia stream comprises second image data, the first and second image data
3 providing different representations of a single image.
- 1 3. The computer-readable medium of claim 1, wherein the data portion
2 includes data related to three or more multimedia streams.
- 1 4. The computer-readable medium of claim 2, wherein the first and
2 second image data comprise compressed and uncompressed image data, respectively.
- 1 5. The computer-readable medium of claim 2, wherein the first image
2 data is derived from a first camera setting and the second image data is derived from a
3 second camera setting.

1 6. The computer-readable medium of claim 2, wherein the first image
2 data represents the single image having a first pixel resolution, and the second image data
3 represents the single image having a second pixel resolution different from the first pixel
4 resolution.

1 7. The computer-readable medium of claim 2, wherein the first image
2 data represents the single image having a first pixel format, and the second image data
3 represents the single image having a second pixel format different from the first pixel
4 format, wherein a pixel format includes one or more components, component ordering,
5 and component numeric formats.

1 8. The computer-readable medium of claim 2, wherein the first image
2 data is derived using a first color space and second image data is derived from a second
3 color space.

1 9. The computer-readable medium of claim 2, wherein the first image
2 data is derived using a first color context and second image data is derived from a second
3 color context.

1 10. The computer-readable medium of claim 2, wherein the first image
2 data represents the single image having a first field of view, and the second image data
3 represents the single image having a second field of view. .

1 11. The computer-readable medium of claim 2, wherein the first image
2 data comprises raw image sensor data.

1 12. The computer-readable medium of claim 1, wherein the second
2 multimedia stream includes data representing an annotation of an image represented by
3 the first image data.

1 13. The computer-readable medium of claim 12, wherein the second
2 multimedia stream comprises audio data.

1 14. The computer-readable medium of claim 12, wherein the second
2 multimedia stream comprises video data.

1 15. The computer-readable medium of claim 1, wherein the second
2 multimedia stream comprises an executable component.

1 16. The computer-readable medium of claim 1, wherein the second
2 multimedia stream comprises second image data, wherein data from the first image data
3 and data from the second image data to be combined to represent an image that is larger
4 than individual images represented by the first and second image data.

1 17. The computer-readable medium of claim 1, wherein the second
2 multimedia stream comprises second image data, wherein data from the first image data

3 and data from the second image data to be combined to represent an image that is of
4 higher quality than individual images represented by the first and second image data.

1 18. The computer-readable medium of claim 1, wherein the data
2 structure further comprises metadata.

1 19. The computer-readable medium of claim 1, wherein the data
2 structure further comprises an index portion to contain information related to a location
3 of data stored in the data portion.

1 20. The computer-readable medium of claim 1, wherein data stored in
2 the data portion is encrypted.

1 21. The computer-readable medium of claim 1, wherein the header
2 portion further comprises digital rights management information.

1 22. The computer-readable medium of claim 21, wherein the digital
2 rights management information contains information related to obtaining a license to
3 access the first image data.

1 23. The computer-readable medium of claim 21, wherein the digital
2 rights management information contains information related to obtaining a license to
3 verify the authenticity of the first image data.

1 24. The computer-readable medium of claim 1, wherein the multimedia
2 data structure is compatible with advanced systems format (ASF).

1 25. The computer-readable medium of claim 1, wherein the second
2 multimedia stream comprises image, audio, video, graphics, text, date and time, location,
3 web links, or animation data.

1 26. A method for forming an image container file, comprising:
2 collecting image data;
3 forming a first multimedia stream in the image container file, the first
4 multimedia stream including a first image data derived from the collected image data and
5 a first header object having information related to the first image data;
6 collecting arbitrary data; and
7 forming a second multimedia stream in the image container file, the second
8 multimedia stream including first arbitrary data derived from the collected arbitrary data
9 and a second header object having information related to the first arbitrary data.

1 27. The method of claim 26, wherein the first arbitrary data comprises
2 second image data, the first and second image data providing different representations of
3 a single image.

1 28. The method of claim 27, wherein the first and second image data
2 comprise compressed and uncompressed image data, respectively.

1 29. The method of claim 27, wherein the first image data is derived from
2 a first camera setting and the second image data is derived from a second camera setting.

1 30. The method of claim 27, wherein the first image data represents the
2 single image having a first pixel resolution, and the second image data represents the
3 single image having a second pixel resolution different from the first pixel resolution.

1 31. The method of claim 27, wherein the first image data represents the
2 single image having a first pixel format, and the second image data represents the single
3 image having a second pixel format different from the first pixel format.

1 32. The method of claim 27, wherein the first image data is derived
2 using a first color space and second image data is derived from a second color space.

1 33. The method of claim 27, wherein the first image data is derived
2 using a first color context and second image data is derived from a second color context.

1 34. The method of claim 26, wherein the first image data comprises raw
2 image sensor data.

1 35. The method of claim 26, wherein the first arbitrary data comprises
2 data representing an annotation of an image represented by the first image data.

1 36. The method of claim 35, wherein the first arbitrary data comprises
2 audio, video, graphics, text, date and time, location, web links, or animation data.

1 37. The method of claim 26, wherein the first arbitrary data comprises
2 an executable component.

1 38. The method of claim 26, wherein the first arbitrary data comprises
2 second image data, wherein data from the first image data and data from the second
3 image data to be combined to represent an image that is larger than individual images
4 represented by the first and second image data.

1 39. The method of claim 26, wherein the first arbitrary data comprises
2 second image data, wherein data from the first image data and data from the second
3 image data to be combined to represent an image that is of higher quality than individual
4 images represented by the first and second image data.

1 40. The method of claim 26, further comprising adding metadata to the
2 image container file.

1 41. The method of claim 26, further comprising forming an index
2 portion to contain information related to a location of data stored in the image container
3 file.

1 42. The method of claim 26, further comprising storing digital rights
2 management information in the image container file.

1 43. The method of claim 42, wherein the digital rights management
2 information contains information related to obtaining a license to access the first image
3 data.

1 44. The method of claim 42, wherein the digital rights management
2 information contains information related to verifying the authenticity the first image data.

1 45. The method of claim 26, wherein the image file container contains
2 encrypted data.

1 46. The method of claim 26, wherein the multimedia data structure is
2 compatible with advanced systems format (ASF).

1 47. The method of claim 26, further comprising forming a plurality of
2 multimedia streams in the image container file, the plurality of multimedia streams
3 including the second multimedia stream, wherein another multimedia stream in the
4 plurality of multimedia streams includes second arbitrary data and a third header object
5 having information related to the second arbitrary data.

1 48. A system for storing image data, the system comprising:
2 an image data receiver; and

3 an image file generator to form an image container file having a plurality of
4 multimedia streams, the plurality of multimedia streams including a first multimedia
5 stream and a second multimedia stream, wherein the first multimedia stream to include
6 first image data derived from image data received by the image data receiver, and the
7 second multimedia stream to include arbitrary data.

1 49. The system of claim 48, wherein the arbitrary data comprises second
2 image data, the first and second image data providing different representations of a single
3 image.

1 50. The system of claim 48, wherein the arbitrary data comprises data
2 representing an annotation of an image represented by the first image data.

1 51. The system of claim 50, wherein the arbitrary data comprises audio,
2 video, graphics, text, date and time, location, web links, or animation data.

1 52. The system of claim 48, wherein the arbitrary data comprises an
2 executable component.

1 53. The system of claim 48, wherein the arbitrary data comprises second
2 image data, wherein data from the first image data and data from the second image data
3 to be combined to represent an image that is larger than individual images represented by
4 the first and second image data.

1 54. The system of claim 48, wherein the arbitrary data comprises second
2 image data, wherein data from the first image data and data from the second image data
3 to be combined to represent an image that is of higher quality than individual images
4 represented by the first and second image data.

1 55. The system of claim 48, wherein the image file generator is further
2 to add metadata to the image container file.

1 56. The system of claim 48, wherein the image file generator is further
2 to add index information related to locations of first image data and the first arbitrary data
3 within the image container file.

1 57. The system of claim 48, wherein the image container file contains
2 encrypted data.

1 58. The system of claim 48, wherein the image file generator is further
2 to store digital rights management information in the image container file.

1 59. The system of claim 58, wherein the digital rights management
2 information contains information related to obtaining a license to access the first image
3 data.

1 60. The system of claim 58, wherein the digital rights management
2 information contains information related to verifying the authenticity of the first image
3 data.

1 61. The system of claim 48, wherein the image container file can be
2 accessed using a multimedia viewer.

1 62. The system of claim 61, wherein the multimedia viewer comprises a
2 viewer that can view advanced systems format (ASF) files.

1 63. A computer-readable medium having components as recited in
2 claim 48.

1 64. A system for storing image data, the system comprising:
2 means for collecting image data; and
3 means for generating an image container file that includes a plurality of
4 multimedia streams, the plurality of multimedia streams including a first multimedia
5 stream and a second multimedia stream, wherein the first multimedia stream includes
6 first image data derived from image data received by the image data receiver, and the
7 second multimedia stream includes arbitrary data.

1 65. The system of claim 64, wherein the arbitrary data comprises second
2 image data, the first and second image data providing different representations of a single
3 image.

1 66. The system of claim 64, wherein the arbitrary data comprises data
2 representing an annotation of an image represented by the first image data.

1 67. The system of claim 66, wherein the arbitrary data comprises audio,
2 video, graphics, text, date and time, location, web links, or animation data.

1 68. The system of claim 64, wherein the means for generating
2 selectively encrypts data contained in the image container file.

1 69. The system of claim 64, wherein the arbitrary data comprises an
2 executable component.

1 70. The system of claim 64, wherein the means for generating includes
2 means for adding metadata to the image container file.

1 71. The system of claim 64, wherein the means for generating includes
2 means for storing index information related to locations of the first image data and the
3 first arbitrary data within the image container file.

1 72. The system of claim 64, further comprising means for storing digital
2 rights management information in the image container file.

1 73. The system of claim 72, wherein the digital rights management
2 information contains information related to obtaining a license to access the first image
3 data.

1 74. The system of claim 72, wherein the digital rights management
2 information contains information related to verifying the authenticity of the first image
3 data.

1 75. A computer-readable medium having components as recited in
2 claim 64.

1 76. The computer-readable medium of claim 2, wherein the camera
2 settings comprises exposure settings.

1 77. The computer-readable medium of claim 2, wherein the camera
2 settings comprises white balance settings.

1 78. The method of claim 25, wherein the camera settings comprises
2 exposure settings.

1 79. The method of claim 25, wherein the camera settings comprises
2 white balance settings.